**IN THE CLAIMS**

**1. (currently amended)** A mobile communication system having a radio base station and a mobile terminal being able to communicate with said radio base station using a specific radio frequency band comprising:

a detecting unit to detect speed information concerning a moving speed of said mobile terminal ~~(hereinafter referred as a terminal moving speed)~~ on the basis of a received signal from said mobile terminal; and

a selection controlling unit to select ~~the~~ a use frequency in a higher radio frequency band when said speed information detected by said detecting unit is higher, select ~~the~~ a use frequency in a lower radio frequency band when said speed information is lower, and assign said selected use frequency to the communication between said mobile terminal and said radio base station.

**2. (currently amended)** A radio base station being able to communicate with a mobile terminal using a specific frequency band comprising:

a radio communicating unit being able to communicate with said mobile terminal using any one of ~~M (M being an integer not less than two)~~ a plurality of radio frequency bands;

a speed information detecting unit to detect speed information concerning a moving speed of said mobile terminal on the basis of a received signal from said mobile terminal received by said radio communicating unit; and

a use frequency selection controlling unit to select ~~the~~ a use frequency in a higher radio frequency band when said speed information ~~(hereinafter referred as speed information)~~ detected by said speed information detecting unit is higher, select ~~the~~ a use frequency in a lower radio frequency band when said information is lower, and assign said selected use frequency to the communication with said mobile terminal.

**3. (original)** The radio base station according to claim 2, wherein a threshold value information about said speed information, which represents a boundary between said higher speed and said lower speed, is determined on the basis of interference power information with communication with said mobile terminal.

**4. (original)** The radio base station according to claim 2, wherein said use frequency selection controlling unit comprises:

a notification signal generating unit to generate a selected frequency notification signal for notifying said mobile terminal of the selected use frequency; and

a switching timing instruction signal generating unit to generate a switching timing instruction signal for instructing said mobile terminal of a switching timing to the selected use frequency when receiving a confirmation signal in response to said selected frequency notification signal from said mobile terminal;

said radio communicating unit comprises;

a control signal adding unit to add said selected frequency notification signal generated by said notification signal generating unit or said switching timing instruction

signal generated by said switching timing instruction signal generating unit to a transmitting signal to said mobile terminal; and

a confirmation signal extracting unit to extract said confirmation signal from a received signal from said mobile terminal, and transmitting said confirmation signal to said switching timing instruction signal generating unit of said use frequency selection controlling unit.

**5. (currently amended)** The radio base station according to claim 2, wherein said use frequency selection controlling unit comprises a determining unit to compare said speed information detected by said speed information detecting unit with each of ~~(2×M-1)~~ a plurality of pieces of threshold value information about said speed information to determine which range of said threshold value information said speed information falls in;

said use frequency selection controlling unit selects said use frequency on the basis of a result of determination by said determining unit, and priority information for deciding which radio frequency band should be used for each of a plurality of terminal speed ranges defined by said threshold value information.

**6. (original)** The radio base station according to claim 3, wherein said interference power information is determined on the basis of a signal transmission characteristic of each of said radio frequency bands.

**7. (original)** The radio base station according to claim 3, wherein said use frequency selection controlling unit comprises:

a monitoring unit to monitor information about the number of mobile terminals presently in communication;

a received signal-to-noise power ratio estimating unit to determine a measured value of a received signal-to-noise power ratio on the basis of a signal received from said mobile terminal by said radio communicating unit; and

an interference power ratio information calculating unit to calculate said interference power information on the basis of said information about the number of mobile terminals monitored by said monitoring unit and said measured value of said received signal-to-noise power ratio.

**8. (original)** The radio base station according to claim 3, wherein said use frequency selection controlling unit comprises:

a notification signal generating unit to generate a selected frequency notification signal for notifying said mobile terminal of the selected use frequency; and

a switching timing instruction signal generating unit to generate a switching timing instruction signal for instructing said mobile terminal of a switching timing to the selected use frequency when receiving a confirmation signal in response to said selected frequency notification signal from said mobile terminal;

said radio communicating unit comprises;

a control signal adding unit to add said selected frequency notification signal generated by said notification signal generating unit or said switching timing instruction

signal generated by said switching timing instruction signal generating unit to a transmitting signal to said mobile terminal; and

a confirmation signal extracting unit to extract said confirmation signal from a received signal from said mobile terminal, and transmitting said confirmation signal to said switching timing instruction signal generating unit of said use frequency selection controlling unit.

**9. (currently amended)** The radio base station according to claim 3, wherein said use frequency selection controlling unit comprises a determining unit for comparing said speed information detected by said speed information detecting unit with each of ~~(2×M-1)~~ a plurality of pieces of threshold value information about said speed information to determine which range of said threshold value information said speed information falls in;

said use frequency selection controlling unit selects said use frequency on the basis of a result of determination by said determining unit, and priority information for deciding which radio frequency band should be used for each of a plurality of terminal speed ranges defined by said threshold value information.

**10. (original)** The radio base station according to claim 6, wherein said use frequency selection controlling unit comprises:

a monitoring unit to monitor information about the number of mobile terminals presently in communication;

a received signal-to-noise power ratio estimating unit to determine a measured value of a received signal-to-noise power ratio on the basis of a signal received from said mobile terminal by said radio communicating unit; and

an interference power ratio information calculating unit to calculate said interference power information on the basis of said information about the number of mobile terminals monitored by said monitoring unit and said measured value of said received signal-to-noise power ratio.

**11. (original)** The radio base station according to claim 6, wherein said use frequency selection controlling unit comprises:

a notification signal generating unit to generate a selected frequency notification signal for notifying said mobile terminal of the selected use frequency; and

a switching timing instruction signal generating unit to generate a switching timing instruction signal for instructing said mobile terminal of a switching timing to the selected use frequency when receiving a confirmation signal in response to said selected frequency notification signal from said mobile terminal;

said radio communicating unit comprises;

a control signal adding unit to add said selected frequency notification signal generated by said notification signal generating unit or said switching timing instruction signal generated by said switching timing instruction signal generating unit to a transmitting signal to said mobile terminal; and

a confirmation signal extracting unit to extract said confirmation signal from a received signal from said mobile terminal, and transmitting said confirmation

signal to said switching timing instruction signal generating unit of said use frequency selection controlling unit.

**12. (currently amended)** The radio base station according to claim 6, wherein said use frequency selection controlling unit comprises a determining unit for comparing said speed information detected by said speed information detecting unit with each of ~~(2×M-1)~~ a plurality of pieces of threshold value information about said speed information to determine which range of said threshold value information said speed information falls in;

said use frequency selection controlling unit selects said use frequency on the basis of a result of determination by said determining unit, and priority information for deciding which radio frequency band should be used for each of a plurality of terminal speed ranges defined by said threshold value information.

**13. (original)** The radio base station according to claim 10, wherein said use frequency selection controlling unit comprises:

a notification signal generating unit to generate a selected frequency notification signal for notifying said mobile terminal of the selected use frequency; and

a switching timing instruction signal generating unit to generate a switching timing instruction signal for instructing said mobile terminal of a switching timing to the selected use frequency when receiving a confirmation signal in response to said selected frequency notification signal from said mobile terminal;

said radio communicating unit comprises;

a control signal adding unit to add said selected frequency notification signal generated by said notification signal generating unit or said switching timing instruction signal generated by said switching timing instruction signal generating unit to a transmitting signal to said mobile terminal; and

a confirmation signal extracting unit to extract said confirmation signal from a received signal from said mobile terminal, and transmitting said confirmation signal to said switching timing instruction signal generating unit of said use frequency selection controlling unit.

**14. (currently amended)** The radio base station according to claim 10, wherein said use frequency selection controlling unit comprises a determining unit for comparing said speed information detected by said speed information detecting unit with each of ~~(2×M-1)~~ a plurality of pieces of threshold value information about said speed information to determine which range of said threshold value information said speed information falls in;

said use frequency selection controlling unit selects said use frequency on the basis of a result of determination by said determining unit, and priority information for deciding which radio frequency band should be used for each of a plurality of terminal speed ranges defined by said threshold value information.

**15. (currently amended)** The radio base station according to claim 13, wherein said use frequency selection controlling unit comprises a determining unit for comparing said speed information detected by said speed information detecting unit with each of

~~(2×M-1)~~ a plurality of pieces of threshold value information about said speed information to determine which range of said threshold value information said speed information falls in;

said use frequency selection controlling unit selects said use frequency on the basis of a result of determination by said determining unit, and priority information for deciding which radio frequency band should be used for each of a plurality of terminal speed ranges defined by said threshold value information.

**16. (original)** A radio base station employing a communication system having a characteristic that a required signal-to-noise power ratio of a received signal in a mobile terminal changes from a tendency to increase to a tendency to decrease according to a moving speed of said mobile terminal, said radio base station comprising:

a radio communicating unit being able to communicate with said mobile terminal using both a frequency belonging to a first frequency band and a frequency belonging to a second frequency band higher than said first frequency band;

a speed information detecting unit to detect information concerning a moving speed of said mobile terminal from a signal received from said mobile terminal; and

a use frequency selection controlling unit to at least select a frequency belonging to said second frequency band as the use frequency in said radio communication unit when said information detected by said speed information detecting unit is not higher than information at which said tendency of said characteristic in said first frequency band changes, select a frequency belonging to said first frequency band as the use frequency in said radio communicating unit when said information detected by said speed information

detecting unit is not lower than speed information at which said tendency of said characteristic in said second frequency band changes.

**17. (original)** A radio apparatus being able to use both a frequency belonging to a first frequency band and a frequency belonging to a second frequency band higher than said first frequency band for communication on forward and reverse links with a mobile terminal, said radio apparatus comprising:

a transmitting unit to convert a signal obtained by error-correction-encoding and interleave transmitting data into a radio signal, and transmit said radio signal for communication on the forward link to said mobile terminal;

a transmitting power controlling unit to control a transmitting power of said radio signal for communication on the forward link on the basis of a received signal from said mobile terminal; and

a selection controlling unit to use a frequency belonging to said second frequency band for communication with said mobile terminal when determining that a fading cycle of the received signal from said mobile terminal or a moving speed of said mobile terminal is fast, use a frequency belonging to said first frequency band for communication with said mobile terminal when determining that said fading cycle or said moving speed of said mobile terminal is slow.

**18. (original)** A radio apparatus being able to use both a frequency belonging to a first frequency band and a frequency belonging to a second frequency band higher than

said first frequency band for communication on forward and reverse links with a mobile terminal, said radio apparatus comprising:

a transmitting unit to convert a signal obtained by encoding and interleaving transmitting data into a radio signal, and transmit said radio signal for communication on the forward link to said mobile terminal;

a transmitting power controlling unit to control a transmitting power of said radio signal for communication on the forward link on the basis of a received signal from said mobile terminal; and

a selection controlling unit to use a frequency belonging to said second frequency band in communication with said mobile terminal when determining on the basis of said received signal from said mobile terminal that a fading cycle in a received signal on the forward link received by said mobile terminal or a moving speed of said mobile terminal is fast, use a frequency belonging to said first frequency band in communication with said mobile terminal when determining that said fading cycle or said moving speed of said mobile terminal is slow.

**19. (currently amended)** A mobile terminal being able to communicate with a radio base station using a specific radio frequency band comprising:

a radio communicating unit being able to communicate with said radio base station using any one of ~~M (M being an integer not less than two)~~ a plurality of radio frequency bands;

a selected frequency notification signal receiving unit to receive, from said radio communicating unit, a selected frequency notification signal for notifying of a use

frequency selected among higher radio frequency bands in said radio base station when speed information of its own is faster or selected among lower radio frequency bands when the speed information of its own is slower; and

a use frequency selection controlling unit to select a radio frequency to be used in said radio communicating unit among said radio frequency bands according to said selected frequency notification signal received by said selected frequency notification signal receiving unit.

**20. (original)** The mobile terminal according to claim 19 further comprising:

a confirmation signal transmitting unit to transmit a confirmation signal in response to said selected frequency notification signal to said radio base station;

a switching timing instruction signal receiving unit to receive a switching timing instruction signal as a response to said confirmation signal from said radio base station;

said use frequency selection controlling unit to execute a switching to a radio frequency notified by said selected frequency notification signal at a timing defined by said switching timing instruction signal received by said switching timing instruction signal receiving unit.